



Mr. Michael Ribordy
On-Scene Coordinator
USEPA Region 5
77 West Jackson Boulevard (SE-5J)
Chicago, IL 60604-3590

Subject
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Time-Critical Removal Action – Former Plainwell Impoundment
Monthly Report (December 2008)

Dear Mike:

Attached is the 22nd monthly progress report for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Time-Critical Removal Action (TCRA). This progress report is submitted in accordance with Section 19A of the February 2007 Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action (Docket No. V-W-07-C-863).

If you have any questions, please do not hesitate to contact me.

Sincerely,

ARCADIS

Stephen Garbaciak Jr., P.E.
Vice President

Copies
Samuel Borries, USEPA
Paul Bucholtz, MDEQ
James Saric, USEPA
Jeff Keiser, CH2M HILL
Kathy Huibregtse, RMT Inc.
J. Michael Davis, Esq., Georgia-Pacific LLC
David Guier, Millennium Holdings, LLC
Stephen Weishar, Millennium Holdings, LLC
Paul Montney, P.E., Georgia-Pacific LLC
L. Chase Fortenberry, P.G., Georgia-Pacific LLC
Garry Griffith, P.E., Georgia-Pacific LLC
Michael Erickson, P.E., ARCADIS

ARCADIS
30 West Monroe, Suite 1710
Chicago
Illinois 60603
Tel 312 332 4937
Fax 312 332 4434
www.arcadis-us.com

SEDIMENTS

Date
January 15, 2009

Contact
Steve Garbaciak

Phone
312.332.4937 ext 12

Email
steve.garbaciak@
arcadis-us.com

Our ref
B0064530 00014



**MONTHLY REPORT FOR THE ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
TIME-CRITICAL REMOVAL ACTION – FORMER PLAINWELL IMPOUNDMENT**

REPORT #22, DECEMBER 2008

**PREPARED BY ARCADIS
JANUARY 15, 2009**

ON BEHALF OF THE KALAMAZOO RIVER STUDY GROUP

SUBMITTED TO

**MICHAEL RIBORDY, ON-SCENE COORDINATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Monthly Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site TCRA – Former Plainwell Impoundment**

REPORT #22, DECEMBER 2008

Significant Developments and Activities During the Period

- On December 5, the Kalamazoo River Study Group (KRSG) submitted the 74th *Weekly Construction Report for the Plainwell TCRA* to United States Environmental Protection Agency (USEPA) and Michigan Department of Environmental Quality (MDEQ)
- On December 8, 16, 17, and 18, the KRSG submitted copies of analytical data from TCRA sampling activities to USEPA.
- On December 15, the KRSG submitted the 21st *Monthly Report for the Allied Paper, Inc /Portage Creek/Kalamazoo River Superfund Site TCRA* for November 2008 to USEPA.
- On December 17, representatives from the KRSG, USEPA, MDEQ, and Michigan Department of Natural Resources attended the monthly Stakeholder's Meeting in Plainwell.

Data Collected and Field Activities Conducted During the Period

- During the week of December 1, the KRSG continued removing the remaining sediment and access across the Phase 2 Cofferdam and continued removal of the WCS. Two surface water samples (TS30112 and TS30113) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. A rinse blank (TS30114) was also collected. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.
- During the week of December 8, the KRSG continued excavation of Removal Area 13A, continued removing the remaining sediment and access across the Phase 2 Cofferdam, and continued removal of the WCS. Two surface water samples (TS30115 and TS30116) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. Work boats had all been demobilized from the site, so the surface water samples were collected from the shoreline nearest the sampling locations. The samples could be collected without a stainless steel bomb sampler, so a rinse blank was not required. Surface water samples will be collected in this manner for the duration of construction activities. Two sets of wastewater samples (W_SA4N_X_0025 and W_SA4N_X_0026) were collected from the water treatment system located at Staging Area 4N. Each set of wastewater samples consists of one influent (e.g., W_SA4N_Influ_0025), two mid-point (e.g., W_SA4N_MidA_0025 and W_SA4N_MidB_0025), and two effluent samples (e.g., W_SA4N_EffluA_0025 and W_SA4N_EffluB_0025). A duplicate effluent

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sample (W_SA4N_Dup_0008) was also collected. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal, solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.

- During the week of December 15, the KRSRG continued excavation of Removal Area 13A, continued removing the remaining sediment and access across the Phase 2 Cofferdam, and continued removal of the WCS. Two soil confirmation samples (TS20256 and TS20257) were collected from Removal Area 13A and submitted for PCB analysis. The USEPA collected a split sample of TS20257 (APS-121708-46-SD/TS20257). Two surface water samples (TS30117 and TS30118) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.
- During the week of December 22, the KRSRG continued excavation of Removal Area 13A and continued removal of the WCS. Two surface water samples (TS30119 and TS30120) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. One set of wastewater samples (W_SA4N_X_0027) was collected from the water treatment system located at Staging Area 4N. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.
- During the week of December 29, the KRSRG continued excavation of Removal Area 13A, began removal of the Phase 2 Cofferdam, and continued removal of the WCS. Two soil confirmation samples (TS20258 and TS20259) were collected from Removal Area 13A and submitted for PCB analysis. Two surface water samples (TS30121 and TS30122) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal, solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.

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- As of December 31, approximately 120,890 cubic yards of material had been excavated from Removal Areas 1, 2A and 2B, 3A and 3B, 4A and 4B, 5, 6A and 6B, 7, 8, 9A, 9B, 10A, 10B, 11A, 11B, 12A, 12B, 13A, 13B, Mid-Channel Areas A, B, and C, the Phase 1 Cofferdam Area, the Phase 2 Cofferdam Area, Upland Areas 3A1, 3A2, 4A1, 6B1, 10B1, 11A1, 12A1, 13A1, and Islands 1, 2, and 3.

Laboratory Data Received During the Period

- During the week of December 1, the KRSR received analytical data for wastewater sample set W_SA4N_X_0024 (collected in November)
- During the week of December 8, the KRSR received analytical data for wastewater sample set W_SA4N_X_0025
- During the week of December 15, the KRSR received analytical data for soil confirmation samples TS20256 and TS20257, surface water samples TS30102 through TS30111 (collected in November) and TS30112 through TS30114, wastewater sample set W_SA4N_X_0026, duplicate effluent sample W_SA4N_Dup_0008, and preliminary confirmation that PCBs were not detected in USEPA split sample APS-121708-46-SD/TS20257. A final hard copy of the USEPA split sample data was not received in December.
- No analytical data were received during the week of December 22.
- During the week of December 29, the KRSR received analytical data for soil confirmation samples TS20258 and TS20259 and waste water sample set W_SA4N_X_0027.
- The KRSR is awaiting analytical results for surface water samples TS30115 through TS30122 and USEPA split sample APS-121708-46-SD/TS20257.

Issues Encountered and Actions Taken

- A PCB concentration of 8.8 milligrams per kilogram (mg/kg) was detected in soil sample TS20258, collected from Removal Area 13A, Grid 9A TSCA on December 30. This exceeds the action limit of 5 mg/kg established for the project. An additional 6 inches of material will be excavated during the week of January 5, and the grid will be resampled.

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Developments Anticipated During the Next Reporting Period

- During the week of January 1, the KRSG is scheduled to continue excavation activities in Removal Area 13A; continue removal of the Phase 2 Cofferdam; continue removal and decontamination of resuspension controls and project equipment; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of January 5, the KRSG is scheduled to complete excavation activities in Removal Area 13A; continue removal of the Phase 2 Cofferdam; continue decommissioning of Staging Area 4N; continue removal and decontamination of resuspension controls and project equipment; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of January 12, the KRSG is scheduled to continue removal of the WCS; complete removal of the Phase 2 Cofferdam; continue decommissioning of Staging Area 4N, continue removal and decontamination of resuspension controls and project equipment; and continue loading and transporting solidified material to the appropriate landfill
- During the week of January 19, the KRSG is scheduled to complete removal of the WCS; continue decommissioning of Staging Area 4N, continue removal and decontamination of resuspension controls and project equipment; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of January 26, the KRSG is scheduled to complete decommissioning of Staging Area 4N, complete removal and decontamination of resuspension controls and project equipment; and complete loading and transporting solidified material to the appropriate landfill.
- The KRSG will continue to submit the *Weekly Construction Report for the Plainwell TCRA* to USEPA and MDEQ in January.
- The KRSG will continue to submit copies of analytical data from TCRA sampling activities to USEPA in January.
- Throughout January, the KRSG will, as necessary, continue to submit Subcontractor Qualification Notifications to USEPA, as required by Paragraph 11 of the TCRA AOC.

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Former Plainwell Impoundment TCRA
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Table A — Summary of Samples Collected and Data Received in December 2008

Sample ID	Sample Date	Date Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action Limit	Response Action
Soil Confirmation Samples									
TS20256	12/17/08	12/19/08	085316	KAR Labs	RA 13A, Grd 10 (BS)	PCBs	< 0.33 mg/kg	5 mg/kg	None
TS20257 ¹					RA 13A, Grd 9 (BS)	PCBs	< 0.33 mg/kg	5 mg/kg	None
APS-121708-46-SD/TS20257	12/17/08	NR ²	NR	NR	RA 13A, Grid 9 (BS)	PCBs	-	-	None
TS20258	12/30/08	12/31/08	085438	KAR Labs	RA 13A, Grid 9A TSCA	PCBs	8.8 mg/kg	5 mg/kg	Excavate an additional 6" of material in January
TS20259					RA 13A, Grid 9B TSCA	PCBs	1.6 mg/kg	5 mg/kg	
Surface Water Samples									
TS30102	11/13/08	12/16/08	TCRA101_SDSP	TAL	300' downstream RA 13A	PCBs	< 0.052 µg/L	No Action Limit	None
TS30103					200' upstream of RA 13A	PCBs	< 0.051 µg/L	No Action Limit	None
TS30104					Rinse Blank	PCBs	< 0.056 µg/L	No Action Limit	None
TS30105	11/20/08	12/16/08	TCRA101_SDSP	TAL	300' downstream RA 13A	PCBs	< 0.050 µg/L	No Action Limit	None
TS30106					200' upstream of RA 13A	PCBs	< 0.054 µg/L	No Action Limit	None
TS30107					Rinse Blank	PCBs	< 0.053 µg/L	No Action Limit	None
TS30108	11/25/08	12/17/08	TCRA103_SDSP	TAL	300' downstream RA 13A	PCBs	< 0.051 µg/L	No Action Limit	None
TS30109					200' upstream of RA 13A	PCBs	< 0.053 µg/L	No Action Limit	None
(TS30110)					(PCBs)	(PCBs)	(< 0.052 µg/L)	(No Action Limit)	(None)
TS30111	12/04/08	12/17/08	TCRA103_SDSP	TAL	Rinse Blank	PCBs	< 0.051 µg/L	No Action Limit	None
TS30112					300' downstream RA 13A	PCBs	< 0.051 µg/L	No Action Limit	None
TS30113					200' upstream of RA 13A	PCBs	< 0.050 µg/L	No Action Limit	None
TS30114	12/12/08	NR	NR	TAL	Rinse Blank	PCBs	< 0.050 µg/L	No Action Limit	None
TS30115 ³					300' downstream RA 13A	PCBs	-	-	-
TS30116 ³					200' upstream of RA 13A	PCBs	-	-	-
TS30117 ³	12/18/08	NR	NR	TAL	300' downstream RA 13A	PCBs	-	-	-
TS30118 ³					200' upstream of RA 13A	PCBs	-	-	-
TS30119 ³	12/23/08	NR	NR	TAL	300' downstream RA 13A	PCBs	-	-	-
TS30120 ³					200' upstream of RA 13A	PCBs	-	-	-
TS30121 ³	12/30/08	NR	NR	TAL	300' downstream RA 13A	PCBs	-	-	-
TS30122 ³					200' upstream of RA 13A	PCBs	-	-	-
Wastewater Samples									
W_SA4N_Influ_0024	11/26/08	12/01/08	084971	KAR Labs	Staging Area 4N, Discharge 24, influent sample	PCBs	0.1 µg/L	No Action Limit	None
W_SA4N_MidA_0024					Staging Area 4N, Discharge 24, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluA_0024					Staging Area 4N, Discharge 24, effluent sample, right side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_MidB_0024					Staging Area 4N, Discharge 24, midpoint sample, left side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluB_0024					Staging Area 4N, Discharge 24, effluent sample, left side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L

See Notes on Page 2

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Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Former Plainwell Impoundment TCRA
Monthly Report #22, December 2008**

Table A — Summary of Samples Collected and Data Received in December 2008

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action Limit	Response Action
Wastewater Samples continued									
W_SA4N_Influ_0025	12/10/08	12/11/08	085166	KAR Labs	Staging Area 4N, Discharge 25, influent sample	PCBs	0.1 µg/L	No Action Limit	None
W_SA4N_MidA_0025					Staging Area 4N, Discharge 25, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluA_0025					Staging Area 4N, Discharge 25, effluent sample, right side	PCBs, TSS, P	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L, P=0.10 mg/L, no action limit
W_SA4N_MidB_0025					Staging Area 4N, Discharge 25, midpoint sample, left side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluB_0025					Staging Area 4N, Discharge 25, effluent sample, left side	PCBs, TSS, P	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L, P=0.10 mg/L, no action limit
W_SA4N_Influ_0026	12/12/08	12/15/08	085232	KAR Labs	Staging Area 4N, Discharge 26, influent sample	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_MidA_0026					Staging Area 4N, Discharge 26, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluA_0026					Staging Area 4N, Discharge 26, effluent sample, right side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_MidB_0026					Staging Area 4N, Discharge 26, midpoint sample, left side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluB_0026 [W_SA4N_Dup_0008]					Staging Area 4N, Discharge 26, effluent sample, left side	PCBs, TSS	< 0.1 µg/L [< 0.1 µg/L]	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L [0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L]	None TSS = <4 mg/L, Action Limit = 45 mg/L [None TSS = <4 mg/L, Action Limit = 45 mg/L]
W_SA4N_Influ_0027	12/26/08	12/30/08	085413	KAR Labs	Staging Area 4N, Discharge 27, influent sample	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_MidA_0027					Staging Area 4N, Discharge 27, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluA_0027					Staging Area 4N, Discharge 27, effluent sample, right side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_MidB_0027					Staging Area 4N, Discharge 27, midpoint sample, left side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluB_0027					Staging Area 4N, Discharge 27, effluent sample, left side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L

Notes:

- 1 - Split of the sample collected by USEPA
- 2 - USEPA verbally confirmed that PCBs were not detected in the soil sample, however a final hard copy of the analytical results was not received
- 3 - Work boats were demobilized during December. Surface water samples were collected from the shore line. Since the water in this area is shallow, the stainless steel bomb sampler (and associated rinse blank) was not needed
- * USEPA split samples are shown in bold and italicized font
- * Duplicate samples are shown in brackets
- * Analytical results have not been validated

(BS) - Bank Sample
NR - not received
P - phosphorus
PCBs - polychlorinated biphenyls
RA - Removal Area
TAL - TestAmerica Laboratories

TSCA - Sample collected from portion of sampling grid with PCB concentrations greater than 50 mg/kg prior to excavation
TSS - total suspended solids
mg/kg - milligrams per kilogram
mg/L - milligrams per liter
µg/L - micrograms per liter

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Developments Anticipated During the Next Reporting Period

- During the week of January 1, the KRSG is scheduled to continue excavation activities in Removal Area 13A; continue removal of the Phase 2 Cofferdam; continue removal and decontamination of resuspension controls and project equipment; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of January 5, the KRSG is scheduled to complete excavation activities in Removal Area 13A, continue removal of the Phase 2 Cofferdam; continue decommissioning of Staging Area 4N; continue removal and decontamination of resuspension controls and project equipment; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of January 12, the KRSG is scheduled to continue removal of the WCS, complete removal of the Phase 2 Cofferdam; continue decommissioning of Staging Area 4N, continue removal and decontamination of resuspension controls and project equipment; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of January 19, the KRSG is scheduled to complete removal of the WCS; continue decommissioning of Staging Area 4N; continue removal and decontamination of resuspension controls and project equipment; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of January 26, the KRSG is scheduled to complete decommissioning of Staging Area 4N; complete removal and decontamination of resuspension controls and project equipment; and complete loading and transporting solidified material to the appropriate landfill.
- The KRSG will continue to submit the *Weekly Construction Report for the Plainwell TCRA* to USEPA and MDEQ in January.
- The KRSG will continue to submit copies of analytical data from TCRA sampling activities to USEPA in January.
- Throughout January, the KRSG will, as necessary, continue to submit Subcontractor Qualification Notifications to USEPA, as required by Paragraph 11 of the TCRA AOC

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- As of December 31, approximately 120,890 cubic yards of material had been excavated from Removal Areas 1, 2A and 2B, 3A and 3B, 4A and 4B, 5, 6A and 6B, 7, 8, 9A, 9B, 10A, 10B, 11A, 11B, 12A, 12B, 13A, 13B, Mid-Channel Areas A, B, and C, the Phase 1 Cofferdam Area, the Phase 2 Cofferdam Area, Upland Areas 3A1, 3A2, 4A1, 6B1, 10B1, 11A1, 12A1, 13A1, and Islands 1, 2, and 3

Laboratory Data Received During the Period

- During the week of December 1, the KRSG received analytical data for wastewater sample set W_SA4N_X_0024 (collected in November).
- During the week of December 8, the KRSG received analytical data for wastewater sample set W_SA4N_X_0025
- During the week of December 15, the KRSG received analytical data for soil confirmation samples TS20256 and TS20257, surface water samples TS30102 through TS30111 (collected in November) and TS30112 through TS30114, wastewater sample set W_SA4N_X_0026, duplicate effluent sample W_SA4N_Dup_0008, and preliminary confirmation that PCBs were not detected in USEPA split sample APS-121708-46-SD/TS20257. A final hard copy of the USEPA split sample data was not received in December
- No analytical data were received during the week of December 22.
- During the week of December 29, the KRSG received analytical data for soil confirmation samples TS20258 and TS20259 and waste water sample set W_SA4N_X_0027.
- The KRSG is awaiting analytical results for surface water samples TS30115 through TS30122 and USEPA split sample APS-121708-46-SD/TS20257.

Issues Encountered and Actions Taken

- A PCB concentration of 8.8 milligrams per kilogram (mg/kg) was detected in soil sample TS20258, collected from Removal Area 13A, Grid 9A TSCA on December 30. This exceeds the action limit of 5 mg/kg established for the project. An additional 6 inches of material will be excavated during the week of January 5, and the grid will be resampled.

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sample (W_SA4N_Dup_0008) was also collected. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.

- During the week of December 15, the KRSRG continued excavation of Removal Area 13A, continued removing the remaining sediment and access across the Phase 2 Cofferdam, and continued removal of the WCS. Two soil confirmation samples (TS20256 and TS20257) were collected from Removal Area 13A and submitted for PCB analysis. The USEPA collected a split sample of TS20257 (APS-121708-46-SD/TS20257). Two surface water samples (TS30117 and TS30118) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.
- During the week of December 22, the KRSRG continued excavation of Removal Area 13A and continued removal of the WCS. Two surface water samples (TS30119 and TS30120) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. One set of wastewater samples (W_SA4N_X_0027) was collected from the water treatment system located at Staging Area 4N. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.
- During the week of December 29, the KRSRG continued excavation of Removal Area 13A, began removal of the Phase 2 Cofferdam, and continued removal of the WCS. Two soil confirmation samples (TS20258 and TS20259) were collected from Removal Area 13A and submitted for PCB analysis. Two surface water samples (TS30121 and TS30122) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.

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- On December 17, representatives from the KRSG, USEPA, MDEQ, and Michigan Department of Natural Resources attended the monthly Stakeholder's Meeting in Plainwell.

Data Collected and Field Activities Conducted During the Period

- During the week of December 1, the KRSG continued removing the remaining sediment and access across the Phase 2 Cofferdam and continued removal of the WCS. Two surface water samples (TS30112 and TS30113) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. A rinse blank (TS30114) was also collected. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Bellevue, Michigan for disposal.
- During the week of December 8, the KRSG continued excavation of Removal Area 13A, continued removing the remaining sediment and access across the Phase 2 Cofferdam, and continued removal of the WCS. Two surface water samples (TS30115 and TS30116) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 13A for PCB analysis. Work boats had all been demobilized from the site, so the surface water samples were collected from the shoreline nearest the sampling locations. The samples could be collected without a stainless steel bomb sampler, so a rinse blank was not required. Surface water samples will be collected in this manner for the duration of construction activities. Two sets of wastewater samples (W_SA4N_X_0025 and W_SA4N_X_0026) were collected from the water treatment system located at Staging Area 4N. Each set of wastewater samples consists of one influent (e.g., W_SA4N_Influ_0025), two mid-point (e.g., W_SA4N_MidA_0025 and W_SA4N_MidB_0025), and two effluent samples (e.g., W_SA4N_EffluA_0025 and W_SA4N_EffluB_0025). A duplicate effluent

**MONTHLY REPORT FOR THE ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
TIME-CRITICAL REMOVAL ACTION – FORMER PLAINWELL IMPOUNDMENT**

REPORT #22, DECEMBER 2008

**PREPARED BY ARCADIS
JANUARY 15, 2009**

ON BEHALF OF THE KALAMAZOO RIVER STUDY GROUP

SUBMITTED TO

**MICHAEL RIBORDY, ON-SCENE COORDINATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**



Mr. Michael Ribordy
On-Scene Coordinator
USEPA Region 5
77 West Jackson Boulevard (SE-5J)
Chicago, IL 60604-3590

Subject

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Time-Critical Removal Action – Former Plainwell Impoundment
Monthly Report (December 2008)

Dear Mike:

Attached is the 22nd monthly progress report for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Time-Critical Removal Action (TCRA). This progress report is submitted in accordance with Section 19A of the February 2007 Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action (Docket No. V-W-07-C-863).

If you have any questions, please do not hesitate to contact me.

Sincerely,

ARCADIS

Stephen Garbaciak Jr., P.E.
Vice President

Copies

Samuel Borries, USEPA
Paul Bucholtz, MDEQ
James Saric, USEPA
Jeff Keiser, CH2M HILL
Kathy Huibregtse, RMT Inc.
J Michael Davis, Esq., Georgia-Pacific LLC
David Guier, Millennium Holdings, LLC
Stephen Weishar, Millennium Holdings, LLC
Paul Montney, P.E., Georgia-Pacific LLC
L Chase Fortenberry, P.G., Georgia-Pacific LLC
Garry Griffith, P.E., Georgia-Pacific LLC
Michael Erickson, P.E., ARCADIS

ARCADIS
30 West Monroe, Suite 1710
Chicago
Illinois 60603
Tel 312 332 4937
Fax 312 332 4434
www.arcadis-us.com

SEDIMENTS

Date

January 15, 2009

Contact

Steve Garbaciak

Phone

312.332.4937 ext. 12

Email

steve.garbaciak@
arcadis-us.com

Our ref

B0064530 00014

**Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Former Plainwell Impoundment TCRA
Monthly Report #22, December 2008**

Table A — Summary of Samples Collected and Data Received in December 2008

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action Limit	Response Action
Wastewater Samples continued									
W_SA4N_Influ_0025	12/10/08	12/11/08	085166	KAR Labs	Staging Area 4N, Discharge 25, influent sample	PCBs	0.1 µg/L	No Action Limit	None
W_SA4N_MidA_0025					Staging Area 4N, Discharge 25, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluA_0025					Staging Area 4N, Discharge 25, effluent sample, right side	PCBs, TSS, P	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L, P=0.10 mg/L, no action limit
W_SA4N_MidB_0025					Staging Area 4N, Discharge 25, midpoint sample, left side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluB_0025					Staging Area 4N, Discharge 25, effluent sample, left side	PCBs, TSS, P	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L, P=0.10 mg/L, no action limit
W_SA4N_Influ_0026	12/12/08	12/15/08	085232	KAR Labs	Staging Area 4N, Discharge 26, influent sample	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_MidA_0026					Staging Area 4N, Discharge 26, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluA_0026					Staging Area 4N, Discharge 26, effluent sample, right side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_MidB_0026					Staging Area 4N, Discharge 26, midpoint sample, left side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluB_0026					Staging Area 4N, Discharge 26, effluent sample, left side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
[W_SA4N_Dup_0008]							[< 0.1 µg/L]	[0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L]	[None TSS = <4 mg/L, Action Limit = 45 mg/L]
W_SA4N_Influ_0027	12/26/08	12/30/08	085413	KAR Labs	Staging Area 4N, Discharge 27, influent sample	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_MidA_0027					Staging Area 4N, Discharge 27, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluA_0027					Staging Area 4N, Discharge 27, effluent sample, right side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_MidB_0027					Staging Area 4N, Discharge 27, midpoint sample, left side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluB_0027					Staging Area 4N, Discharge 27, effluent sample, left side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10 ⁻⁵ µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L

Notes

- 1 - Split of the sample collected by USEPA
- 2 - USEPA verbally confirmed that PCBs were not detected in the soil sample, however a final hard copy of the analytical results was not received
- 3 - Work boats were demobilized during December. Surface water samples were collected from the shore line. Since the water in this area is shallow, the stainless steel bomb sampler (and associated rinse blank) was not needed
- * USEPA split samples are shown in bold and italicized font
- * Duplicate samples are shown in brackets
- * Analytical results have not been validated

(BS) - Bank Sample
 NR - not received
 P - phosphorus
 PCBs - polychlorinated biphenyls
 RA - Removal Area
 TAL - TestAmerica Laboratories

TSCA - Sample collected from portion of sampling grid with PCB concentrations greater than 50 mg/kg prior to excavation
 TSS - total suspended solids
 mg/kg - milligrams per kilogram
 mg/L - milligrams per liter
 µg/L - micrograms per liter

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Former Plainwell Impoundment TCRA
Monthly Report #22, December 2008

Table A — Summary of Samples Collected and Data Received in December 2008

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action Limit	Response Action
Soil Confirmation Samples									
TS20256	12/17/08	12/19/08	085316	KAR Labs	RA 13A, Grid 10 (BS)	PCBs	< 0.33 mg/kg	5 mg/kg	None
TS20257 ¹					RA 13A, Grid 9 (BS)	PCBs	< 0.33 mg/kg	5 mg/kg	None
APS-121708-46-SD/TS20257	12/17/08	NR ²	NR	NR	RA 13A, Grid 9 (BS)	PCBs	-	-	None
TS20258	12/30/08	12/31/08	085438	KAR Labs	RA 13A, Grid 9A TSCA	PCBs	8.8 mg/kg	5 mg/kg	Excavate an additional 6" of material in January
TS20259					RA 13A, Grid 9B TSCA	PCBs	1.6 mg/kg	5 mg/kg	
Surface Water Samples									
TS30102	11/13/08	12/16/08	TCRA101_SDSP	TAL	300' downstream RA 13A	PCBs	< 0.052 µg/L	No Action Limit	None
TS30103					200' upstream of RA 13A	PCBs	< 0.051 µg/L	No Action Limit	None
TS30104					Rinse Blank	PCBs	< 0.056 µg/L	No Action Limit	None
TS30105	11/20/08	12/16/08	TCRA101_SDSP	TAL	300' downstream RA 13A	PCBs	< 0.050 µg/L	No Action Limit	None
TS30106					200' upstream of RA 13A	PCBs	< 0.054 µg/L	No Action Limit	None
TS30107					Rinse Blank	PCBs	< 0.053 µg/L	No Action Limit	None
TS30108	11/25/08	12/17/08	TCRA103_SDSP	TAL	300' downstream RA 13A	PCBs	< 0.051 µg/L	No Action Limit	None
TS30109					200' upstream of RA 13A	PCBs	< 0.053 µg/L	No Action Limit	None
TS30110					(PCBs)	[< 0.052 µg/L]	[No Action Limit]	[None]	
TS30111	12/04/08	12/17/08	TCRA103_SDSP	TAL	Rinse Blank	PCBs	< 0.051 µg/L	No Action Limit	None
TS30112					300' downstream RA 13A	PCBs	< 0.051 µg/L	No Action Limit	None
TS30113					200' upstream of RA 13A	PCBs	< 0.050 µg/L	No Action Limit	None
TS30114	12/12/08	NR	NR	TAL	Rinse Blank	PCBs	< 0.050 µg/L	No Action Limit	None
TS30115 ³					300' downstream RA 13A	PCBs	-	-	-
TS30116 ³					200' upstream of RA 13A	PCBs	-	-	-
TS30117 ³	12/18/08	NR	NR	TAL	300' downstream RA 13A	PCBs	-	-	-
TS30118 ³					200' upstream of RA 13A	PCBs	-	-	-
TS30119 ³	12/23/08	NR	NR	TAL	300' downstream RA 13A	PCBs	-	-	-
TS30120 ³					200' upstream of RA 13A	PCBs	-	-	-
TS30121 ³	12/30/08	NR	NR	TAL	300' downstream RA 13A	PCBs	-	-	-
TS30122 ³					200' upstream of RA 13A	PCBs	-	-	-
Wastewater Samples									
W_SA4N_Influ_0024	11/26/08	12/01/08	084971	KAR Labs	Staging Area 4N, Discharge 24, influent sample	PCBs	0.1 µg/L	No Action Limit	None
W_SA4N_MidA_0024					Staging Area 4N, Discharge 24, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluA_0024					Staging Area 4N, Discharge 24, effluent sample, right side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_MidB_0024					Staging Area 4N, Discharge 24, midpoint sample, left side	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA4N_EffluB_0024					Staging Area 4N, Discharge 24, effluent sample, left side	PCBs, TSS	< 0.1 µg/L	0.2 µg/L per discharge, Monthly Average of 2.6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L

See Notes on Page 2